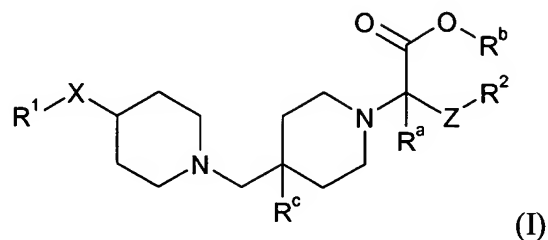


Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A compound of formula (I):



wherein:

R^a and R^b are, independently, hydrogen or C_{1-4} alkyl or R^a forms part of a ring as defined below;

R^c is hydrogen or hydroxy;

X is CH_2 , $C(O)$, O, S, $S(O)$, $S(O)_2$ or NR^3 ;

Z is $CHR^d(CH_2)_n$;

n is 0 or 1;

R^d is hydrogen, C_{1-4} alkyl, hydroxy or C_{1-4} alkoxy;

R^1 is hydrogen, C_{1-6} alkyl, aryl or heterocyclyl;

R^2 is aryl or heterocyclyl;

wherein, unless stated otherwise, the foregoing aryl and heterocyclyl moieties are

optionally substituted by: halogen, cyano, nitro, hydroxy, oxo, $S(O)_pR^4$, $OC(O)NR^5R^6$,

NR^7R^8 , $NR^9C(O)R^{10}$, $NR^{11}C(O)NR^{12}R^{13}$, $S(O)_2NR^{14}R^{15}$, $NR^{16}S(O)_2R^{17}$, $C(O)NR^{18}R^{19}$,

$C(O)R^{20}$, CO_2R^{21} , $NR^{22}CO_2R^{23}$, C_{1-6} alkyl, CF_3 , C_{1-6} alkoxy(C_{1-6})alkyl, C_{1-6} alkoxy,

OCF_3 , C_{1-6} alkoxy(C_{1-6})alkoxy, C_{1-6} alkylthio, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-10} cycloalkyl

(itself optionally substituted by C₁₋₄ alkyl or oxo), methylenedioxy, difluoromethylenedioxy, phenyl, phenyl(C₁₋₄)alkyl, phenoxy, phenylthio, phenyl(C₁₋₄)alkoxy, heterocyclyl, heterocyclyl(C₁₋₄)alkyl, heterocycloxy or heterocyclyl(C₁₋₄)alkoxy; wherein any of the immediately foregoing phenyl and heterocyclyl moieties are optionally substituted with halogen, hydroxy, nitro, S(O)_q(C₁₋₄ alkyl), S(O)₂NH₂, S(O)₂NH(C₁₋₄ alkyl), S(O)₂N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ below), cyano, C₁₋₄ alkyl, C₁₋₄ alkoxy, C(O)NH₂, C(O)NH(C₁₋₄ alkyl), C(O)N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ below), CO₂H, CO₂(C₁₋₄ alkyl), NHC(O)(C₁₋₄ alkyl), NHS(O)₂(C₁₋₄ alkyl), C(O)(C₁₋₄ alkyl), CF₃ or OCF₃;
or Z, R² and R^a together with the carbon atom to which Z and R^a are attached form a ring;
p and q are, independently, 0, 1 or 2;
R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁸, R¹⁹, R²⁰, R^{21'} and R²² are, independently, hydrogen, C₁₋₆ alkyl (optionally substituted by halogen, hydroxy or C₃₋₁₀ cycloalkyl), CH₂(C₂₋₆ alkenyl), phenyl (itself optionally substituted by halogen, hydroxy, nitro, NH₂, NH(C₁₋₄ alkyl), N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ below), S(O)₂(C₁₋₄ alkyl), S(O)₂NH₂, S(O)₂NH(C₁₋₄ alkyl), S(O)₂N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ below), cyano, C₁₋₄ alkyl, C₁₋₄ alkoxy, C(O)NH₂, C(O)NH(C₁₋₄ alkyl), C(O)N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ below), CO₂H, CO₂(C₁₋₄ alkyl), NHC(O)(C₁₋₄ alkyl), NHS(O)₂(C₁₋₄ alkyl), C(O)(C₁₋₄ alkyl), CF₃ or OCF₃) or heterocyclyl (itself optionally substituted by halogen, hydroxy, nitro, NH₂, NH(C₁₋₄ alkyl), N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ below), S(O)₂(C₁₋₄ alkyl), S(O)₂NH₂, S(O)₂NH(C₁₋₄ alkyl), S(O)₂N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ below), cyano, C₁₋₄ alkyl, C₁₋₄ alkoxy, C(O)NH₂, C(O)NH(C₁₋₄ alkyl), C(O)N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ below),

CO₂H, CO₂(C₁₋₄ alkyl), NHC(O)(C₁₋₄ alkyl), NHS(O)₂(C₁₋₄ alkyl), C(O)(C₁₋₄ alkyl), CF₃ or OCF₃);

alternatively NR⁵R⁶, NR⁷R⁸, NR¹²R¹³, NR¹⁴R¹⁵, NR¹⁸R¹⁹, may, independently, form a 4-7 membered heterocyclic ring, azetidine, pyrrolidine, piperidine, azepine, morpholine or piperazine, the latter optionally substituted by C₁₋₄ alkyl on the distal nitrogen;

R⁴, R¹⁷ and R²³ are, independently, C₁₋₆ alkyl (optionally substituted by halogen, hydroxy or C₃₋₁₀ cycloalkyl), CH₂(C₂₋₆ alkenyl), phenyl (itself optionally substituted by halogen, hydroxy, nitro, NH₂, NH(C₁₋₄ alkyl), N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ above), S(O)₂(C₁₋₄ alkyl), S(O)₂NH₂, S(O)₂NH(C₁₋₄ alkyl), S(O)₂N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ above), cyano, C₁₋₄ alkyl, C₁₋₄ alkoxy, C(O)NH₂, C(O)NH(C₁₋₄ alkyl), C(O)N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ above), CO₂H, CO₂(C₁₋₄ alkyl), NHC(O)(C₁₋₄ alkyl), NHS(O)₂(C₁₋₄ alkyl), C(O)(C₁₋₄ alkyl), CF₃ or OCF₃) or heterocyclyl (itself optionally substituted by halogen, hydroxy, nitro, NH₂, NH(C₁₋₄ alkyl), N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ above), S(O)₂(C₁₋₄ alkyl), S(O)₂NH₂, S(O)₂NH(C₁₋₄ alkyl), S(O)₂N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ above), cyano, C₁₋₄ alkyl, C₁₋₄ alkoxy, C(O)NH₂, C(O)NH(C₁₋₄ alkyl), C(O)N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁵ and R⁶ above), CO₂H, CO₂(C₁₋₄ alkyl), NHC(O)(C₁₋₄ alkyl), NHS(O)₂(C₁₋₄ alkyl), C(O)(C₁₋₄ alkyl), CF₃ or OCF₃);

R³ is hydrogen, C₁₋₆ alkyl or benzyl;

or an N-oxide thereof; or a pharmaceutically acceptable salt thereof; or a solvate thereof.

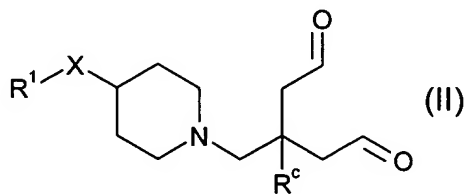
2. (Original) A compound of formula (I) as claimed in claim 1 wherein X is O.
3. (Currently amended) A compound of formula (I) as claimed in claim 1 [[or 2]] wherein the aryl and heterocyclyl moieties of R¹ and R² are, independently, optionally substituted

by: halogen, cyano, nitro, hydroxy, oxo, $S(O)_pR^4$, $OC(O)NR^5R^6$, NR^7R^8 , $NR^9C(O)R^{10}$, $NR^{11}C(O)NR^{12}R^{13}$, $S(O)_2NR^{14}R^{15}$, $NR^{16}S(O)_2R^{17}$, $C(O)NR^{18}R^{19}$, $C(O)R^{20}$, CO_2R^{21} , $NR^{22}CO_2R^{23}$, C_{1-6} alkyl, CF_3 , C_{1-6} alkoxy(C_{1-6})alkyl, C_{1-6} alkoxy or OCF_3 ; p is 0, 1 or 2; R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{18} , R^{19} , R^{20} , R^{21} and R^{22} are, independently, hydrogen, C_{1-6} alkyl (optionally substituted by halogen) or phenyl (itself optionally substituted by halogen, hydroxy, nitro, NH_2 , $NH(C_{1-4}$ alkyl), $N(C_{1-4}$ alkyl) $_2$, $S(O)_2(C_{1-4}$ alkyl), $S(O)_2NH_2$, $S(O)_2NH(C_{1-4}$ alkyl), $S(O)_2N(C_{1-4}$ alkyl) $_2$, cyano, C_{1-4} alkyl, C_{1-4} alkoxy, $C(O)NH_2$, $C(O)NH(C_{1-4}$ alkyl), $C(O)N(C_{1-4}$ alkyl) $_2$, CO_2H , $CO_2(C_{1-4}$ alkyl), $NHC(O)(C_{1-4}$ alkyl), $NHS(O)_2(C_{1-4}$ alkyl), $C(O)(C_{1-4}$ alkyl), CF_3 or OCF_3); and R^4 , R^{17} and R^{23} are, independently, C_{1-6} alkyl (optionally substituted by halogen) or phenyl (itself optionally substituted by halogen, hydroxy, nitro, NH_2 , $NH(C_{1-4}$ alkyl), $N(C_{1-4}$ alkyl) $_2$, $S(O)_2(C_{1-4}$ alkyl), $S(O)_2NH_2$, $S(O)_2NH(C_{1-4}$ alkyl), $S(O)_2N(C_{1-4}$ alkyl) $_2$, cyano, C_{1-4} alkyl, C_{1-4} alkoxy, $C(O)NH_2$, $C(O)NH(C_{1-4}$ alkyl), $C(O)N(C_{1-4}$ alkyl) $_2$, CO_2H , $CO_2(C_{1-4}$ alkyl), $NHC(O)(C_{1-4}$ alkyl), $NHS(O)_2(C_{1-4}$ alkyl), $C(O)(C_{1-4}$ alkyl), CF_3 or OCF_3).

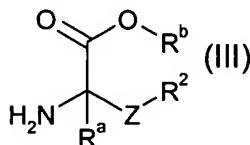
4. (Currently amended) A compound of formula (I) as claimed in claim 1, ~~2 or 3~~ wherein R^1 is phenyl optionally substituted with halogen, cyano, C_{1-4} alkyl or C_{1-4} alkoxy.
5. (Currently amended) A compound of formula (I) as claimed in claim 1, ~~2, 3 or 4~~ wherein R^a is hydrogen.
6. (Currently amended) A compound of formula (I) as claimed in claim 1, ~~2, 3, 4 or 5~~ wherein R^b is hydrogen or methyl.
7. (Currently amended) A compound of formula (I) as claimed in claim 1, ~~2, 3, 4, 5 or 6~~ wherein R^c is hydrogen.

8. (Currently amended) A compound of formula (I) as claimed in ~~any preceding claim~~ claim 1 wherein R^d is hydrogen, hydroxy or C₁₋₄ alkyl.
9. (Currently amended) A compound of formula (I) as claimed in ~~any preceding claim~~ claim 1 wherein Z is CH₂, CH₂CH₂, CHCH₃ or CHOH.
10. (Currently amended) A compound of formula (I) as claimed in ~~any preceding claim~~ claim 1 wherein R² is phenyl or heterocyclyl optionally substituted by halogen, cyano, nitro, hydroxy, NR⁷R⁸, C₁₋₆ alkyl (optionally substituted with halogen), C₁₋₆ alkoxy (optionally substituted with halogen), S(O)_p(C₁₋₆ alkyl), S(O)_rCF₃ or S(O)₂NR¹⁴R¹⁵; p and r are, independently, 0, 1 or 2; and R⁷, R⁸, R¹⁴ and R¹⁵ are, independently, hydrogen, C₁₋₆ alkyl (optionally substituted by halogen, hydroxy or C₃₋₁₀ cycloalkyl), CH₂(C₂₋₅ alkenyl), phenyl (itself optionally substituted by halogen, hydroxy, nitro, NH₂, NH(C₁₋₄ alkyl), N(C₁₋₄ alkyl)₂, S(O)₂(C₁₋₄ alkyl), S(O)₂NH₂, S(O)₂NH(C₁₋₄ alkyl), S(O)₂N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁷ and R⁸ below), cyano, C₁₋₄ alkyl, C₁₋₄ alkoxy, C(O)NH₂, C(O)NH(C₁₋₄ alkyl), C(O)N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁷ and R⁸ below), CO₂H, CO₂(C₁₋₄ alkyl), NHC(O)(C₁₋₄ alkyl), NHS(O)₂(C₁₋₄ alkyl), C(O)(C₁₋₄ alkyl), CF₃ or OCF₃) or heterocyclyl (itself optionally substituted by halogen, hydroxy, nitro, NH₂, NH(C₁₋₄ alkyl), N(C₁₋₄ alkyl)₂, S(O)₂(C₁₋₄ alkyl), S(O)₂NH₂, S(O)₂NH(C₁₋₄ alkyl), S(O)₂N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁷ and R⁸ below), cyano, C₁₋₄ alkyl, C₁₋₄ alkoxy, C(O)NH₂, C(O)NH(C₁₋₄ alkyl), C(O)N(C₁₋₄ alkyl)₂ (and these alkyl groups may join to form a ring as described for R⁷ and R⁸ below), CO₂H, CO₂(C₁₋₄ alkyl), NHC(O)(C₁₋₄ alkyl), NHS(O)₂(C₁₋₄ alkyl), C(O)(C₁₋₄ alkyl), CF₃ or OCF₃); or alternatively NR⁷R⁸ or NR¹⁴R¹⁵ may, independently, form a 4-7 membered heterocyclic ring, azetidine, pyrrolidine, piperidine, azepine, morpholine or piperazine, the latter optionally substituted by C₁₋₄ alkyl on the distal nitrogen.

11. (Currently amended) A compound of formula (I) as claimed in ~~any preceding claim~~ claim 1 wherein R^2 is phenyl or heterocyclyl optionally substituted by halogen, cyano, hydroxy, C_{1-4} alkyl, C_{1-4} haloalkyl or C_{1-4} alkoxy.
12. (Currently amended) A compound of formula (I) as claimed in ~~any preceding claim~~ claim 1 wherein heterocyclyl is indolyl, imidazolyl, thienyl or pyridinyl.
13. (Original) A process for preparing a compound of formula (I) as claimed in claim 1 comprising:
- a. reacting a compound of formula (II):

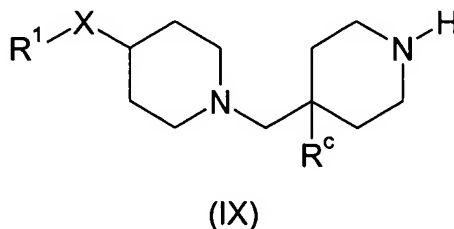


with a compound of formula (III):

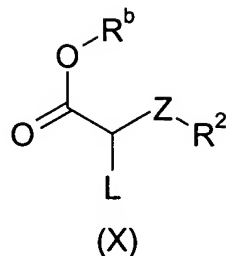


in the presence of $NaBH(OAc)_3$ or $NaBH_3(CN)$ in a suitable solvent at a suitable temperature;

- b. when R^b is not hydrogen, reacting a compound of formula (II) with a compound of formula (III), where R^b is not hydrogen, in the presence of $NaBH(OAc)_3$ in the presence of a suitable base in a suitable solvent at a suitable temperature;
- c. when R^a represents H, reacting a compound of formula (IX):

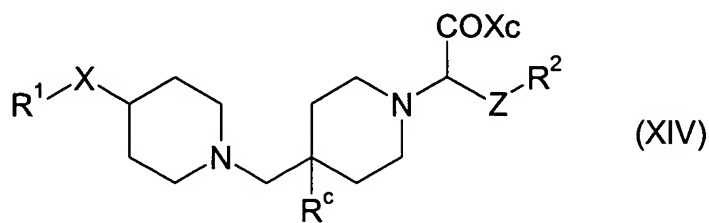


with a compound of formula (X):



wherein L is a suitable leaving group, in a suitable solvent, at a temperature in the range 0°C to 30°C, in the presence of a base; or,

d. when R^a represents H, hydrolysing a compound of formula (XIV):



wherein Xc is a chiral auxiliary, in a suitable solvent, at a temperature between 10°C and reflux of the solvent.

14. (Original) A pharmaceutical composition which comprises a compound of the formula (I), or a pharmaceutically acceptable salt thereof or solvate thereof as claimed in claim 1, and a pharmaceutically acceptable adjuvant, diluent or carrier.
- 15-16. (Cancelled)
17. (Original) A method of treating a chemokine mediated disease state in a mammal suffering from, or at risk of, said disease, which comprises administering to a mammal in need of such treatment a therapeutically effective amount of a compound of formula (I), or a pharmaceutically acceptable salt thereof or solvate thereof as claimed in claim 1.

18. (New) A compound of formula (I) as claimed in claim 2 wherein R¹ is phenyl optionally substituted with halogen, cyano, C₁₋₄ alkyl or C₁₋₄ alkoxy.
19. (New) A compound of formula (I) as claimed in claim 2 wherein R^a is hydrogen.
20. (New) A compound of formula (I) as claimed in claim 2 wherein R^b is hydrogen or methyl.
21. (New) A compound of formula (I) as claimed in claim 2 wherein R^c is hydrogen.
22. (New) A compound of formula (I) as claimed in claim 2 wherein R^d is hydrogen, hydroxy or C₁₋₄ alkyl.